

The use of prescribed burning in managing agricultural lands is a common practice. If properly conducted, it can be an economical and efficient method for removing crop residue after harvest, minimizing pests and weeds, and stimulating plant growth.

Agricultural burning is defined in the Missouri Code of State Regulations as “fires set in connection with agricultural or forestry operations related to the growing or harvesting of crops.” Unless prohibited by other local laws, regulations or local ordinances, this type of burning is permitted in Missouri.



Agricultural Burning and Best Management Practices



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1616 Missouri Blvd.
Jefferson City, MO 65109
(573) 751-4211
www.mda.mo.gov
aginfo@mda.mo.gov

Missouri Department
of Agriculture



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P.O. Box 176
Jefferson City, MO 65102
1-800-361-4827
or (573) 751-4817
www.dnr.mo.gov

Missouri Department
of Natural Resources





Safety and Good Stewardship

It is important to be a good steward and avoid situations that can endanger the public.

Safety - Identify potential hazard areas such as roads, residences and electric lines. It is most desirable to burn with the wind blowing away from the road. Personal safety is also important. Proper clothing made of wool or cotton is necessary, covering the body, arms and legs. A cap, gloves and boots are also recommended for worker safety.

Notification - For safety, it is recommended that before a burn is conducted, neighbors, the local fire department and the Department of Natural Resources' regional offices should be notified. In cases of burning near public roadways, the local sheriff's office should be contacted. This can prevent misunderstandings, unnecessary fire calls and poor public relations.

Communication - Ensure proper communication equipment is available for burn crew members to communicate with each other and with local emergency responders if needed.

Best Management Practices

Safe burning begins with proper preparation. Use these best management tips to prevent potential problems:

- Allow the field several days of drying time for a more effective burn and reduced smoldering.
- Do not burn to the ends of the field. Setting boundaries, "back burning" and keeping the fire off of fence rows will prevent out-of-control burns.
- Disking fields after harvest can reduce the need for residue burning.
- Watch for favorable weather conditions and safe wind speeds. Wind speeds of 5 to 15 mph, steady from a desirable direction are preferred.
- Be aware of drought-like conditions and any bans on burning that may be in place.



Smoke and Air Quality

The airborne particles in smoke are microscopic in size and can present serious health problems. Short-term exposure to particles in smoke can aggravate existing conditions such as lung disease, acute bronchitis and asthma.

Some groups of people are more susceptible to smoke:

- Children are because their respiratory systems are often not fully developed.
- Older adults can be especially if they have heart or lung diseases.

Environmental effects of smoke:

- Visibility can be reduced due to the presence of smoke in the air.
- Fine particles in smoke can be transported long distances and deposited on water, land and property causing nuisance and affecting such things as acidity and nutrients.
- The Clean Air Act requires the EPA to set national standards for the particulate matter that can be found in smoke. Elevated particulate matter concentrations make it more difficult to attain national air quality standards.